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Docket No. 58399US002

**Remarks**

Claims 1-28 are pending in the application. Applicants apologize for incorrectly titling the Pekurovsky Declaration as a declaration under 37 C.F.R. §131, and thank the Examiner for noting that the Pekurovsky Declaration is actually a declaration under §132. The Office Action asserts that the Pekurovsky Declaration was not persuasive. Applicants do not agree with the assertions in the Office Action, but in view of the withdrawal of the prior rejections there is no need at this time to comment further.

**Rejection of Claims 1, 2, 5-15 and 18-24 Under 35 U.S.C. §102.**

Claims 1-2, 4, 9-10, 12-15, 17-18, 23-25 and 28 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,209,815 (Fleming et al.), on grounds that:

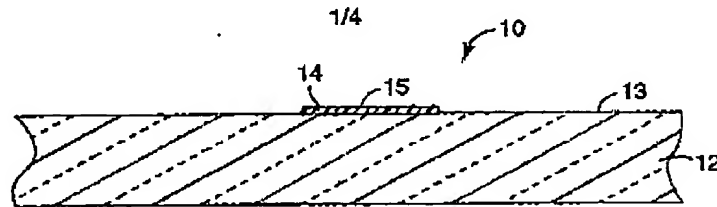
*"Fleming teaches a method of forming patterned films on semiconductor substrates (inherently forming electronic components, same as Applicants Spec. [0032]) comprising; applying a submicron thick release layer 50 of an aromatic polymer onto a substrate which is ultimately patterned (fig. 2F), over which is also applied a continuous polymer underlayer 52 (e.g. of polyimide, etc- col. 4, 15-20) (Fig. 2B), and other layers. Ultimately, adhesive-backed tape 64 lifts off top film layers (Fig. 2J), leaving the patterned release layer 50 and patterned film 62. The release layer may be applied by spin-coating which is the same deposition means as applicants (Spec. Page 6, line 15), such that since both reference and Applicants utilize the identical deposition means for applying the release layer, both would have produced the same patterning results. The release layer inherently must possess a surface energy less than that of the overlying polymer layer, or it would fail in its function as a release layer. The figures indicate the formed sidewalls of the coatings to be substantially perpendicular, per claims 12 and 23. Underlayer 52 is applied by spin coating or other known methods (col. 4, 22-24), same as Applicants. Given the open-ended transitional language of the claim, the claims are open to the additional steps of the reference and accordingly Fleming meets the limitations of the claims as*

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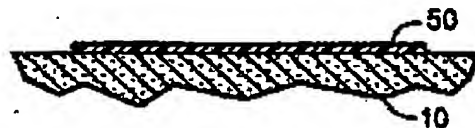
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*interpreted by the Examiner.*" (see the Office Action at pages 2-3, numbered paragraph 4).

Reconsideration is requested. Fleming et al. do not anticipate any of claims 1-2, 4, 9-10, 12-15, 17-18, 23-25 or 28. Applicants' independent method claims 1, 4, 14 and 17 each recite a step a) of "applying a release polymer to a portion of a substrate in a desired pattern". Applicants' independent method claim 25 recites a step a) of "applying a submicron-thickness release polymer layer to a portion of a substrate in a desired pattern". Applicants explain that this step can provide a partly-coated substrate 12 having a patterned release polymer 14 "representing, for example, circuit traces, electrical connections, electrodes or the like" (see e.g., applicants' paragraph 0020 and Fig. 1, reproduced below):

**Fig. 1**

Fleming et al. spincoat a release polymer layer 50 over all of their substrate 10 (see column 3, lines 57-61 and Fleming et al.'s FIG. 2A, reproduced below):

**FIG. 2A**

Fleming et al.'s release polymer layer 50 is drawn using a "scallop" cross-section border at the left and right extremities of layer 50, thus indicating that portions of release polymer layer 50 over the rest of substrate 10 would also be present but have been broken away in FIG. 2A (see the magnified portions of FIG. 2A reproduced below):

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Applicants do not agree with the Office Action's assertion that "since both reference and Applicants utilize the identical deposition means for applying the release layer, both would have produced the same patterning results". Applicants and Fleming et al. do not perform the same release polymer applying step. Applicants apply release polymer to a "portion of the substrate", in a "desired pattern". Fleming et al. apply release polymer over all of their substrate, do not show a step of "applying a release polymer to a portion of a substrate in a desired pattern", and do not perform at least applicants' recited step a). Applicants accordingly request withdrawal of the 35 U.S.C. §102(b) rejection of claims 1-2, 4, 9-10, 12-15, 17-18, 23-25 and 28 as being anticipated by Fleming et al.

**Rejection of Claims 5-8, 11, 19-22 and 27 under 35 U.S.C. §103(a)**

Claims 5-8, 11, 19-22 and 27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Fleming et al., on grounds that:

*"Fleming is cited for the same reasons previously discussed, which are incorporated herein. Fleming teaches applying a polymer layer of 1.9-2.8 microns, the latter being "about 3 microns", onto the release layer, which overlaps the thickness ranges of claims 5-7, 19-21. The subject matter as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made if the overlapping portion of the coating thicknesses disclosed by the reference were selected because overlapping ranges have been held to be a prima facie case of obviousness, see In re Wortheim 191 USPQ 90. Since the bond between the release layer 50 and underlayer 52 must be weaker than subsequent layers, the thickness of the release layer and relative thicknesses between the release and overlayers would*

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*have been determined by routine experimentation to meet the release requirements for specific coatings, per claims 8, 22, 27. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the working thickness ranges of Fleming which overlap those of the Applicants' claims because overlapping ranges have been held to be a prima facie case of obviousness.*

*"It is the Examiner's position that the mechanical tape peeling of the reference would have suggested other conventional mechanical means of coating removal including impact/blasting, etc., per claim 11, hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use such alternate conventional mechanical means in place of the tape peeling system because of the expectation of achieving similar results of coating removal." (see the Office Action at page 4, numbered paragraph 7)*

Reconsideration is requested. Fleming et al. do not show the method of rejected dependent claims 5-8, 11, 19-22 and 27 for at least the reasons already mentioned above. Moreover, no proper modification of Fleming et al. would suggest the method of these rejected claims. A person having ordinary skill in the art who relied on Fleming et al. would apply release polymer over all of a substrate, and not be motivated or enabled to apply a release polymer "to a portion of a substrate in a desired pattern". The proposed routine experimentation with "the thickness of the release layer", with "the relative thicknesses between the release and overlayers", or with "mechanical means of coating removal" would not lead to such a step. Fleming et al. do not show or suggest at least applicants' recited step a), and do not show or suggest the methods of rejected claims 5-8, 11, 19-22 and 27. Applicants accordingly request withdrawal of the 35 U.S.C. §103(a) rejection of claims 5-8, 11, 19-22 and 27 as being unpatentable over Fleming.

#### **Rejection of Claims 3, 16 and 26 under 35 U.S.C. §103(a)**

Claims 3, 16 and 26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Fleming in view of U.S. Patent No. 5,759,625 (Laubacher et al.), on grounds that:

*"Fleming is cited for the same reasons previously discussed, which are incorporated herein. A fluoropolymer release layer is not disclosed.*

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*"Laubacher et al. teaches on column 1, 43-50 that amorphous fluoropolymers have a "smooth, non-stick character" which resists adherence to other polymers, properties which would make the fluorocarbon polymer beneficial as the polymer-based release layer of Fleming. Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Fleming by utilizing the fluorocarbon polymer materials of Laubacher et al. as the release layer because of the low adhesion properties of the fluoropolymer materials to other polymers." (see the Office Action at page 5, numbered paragraph 8)*

Reconsideration is requested. Applicants' above arguments concerning Fleming et al. apply equally to the rejection of claims 3, 16 and 26. Combining Fleming et al. with Laubacher et al. as proposed in the Office Action would not motivate or enable a person having ordinary skill in the art to apply a release polymer "to a portion of a substrate in a desired pattern". Laubacher et al.'s first step is "forming a continuous amorphous fluoropolymer film on a substrate" (see e.g., col. 3, lines 8-11 and col. 6, lines 31-36). Like Fleming et al., Laubacher et al. do not show a step of applying a release polymer "to a portion of a substrate in a desired pattern". Applicants accordingly request withdrawal of the 35 U.S.C. §103(a) rejection of claims 3, 16 and 26 as being unpatentable over Fleming in view of Laubacher et al.

#### Conclusion

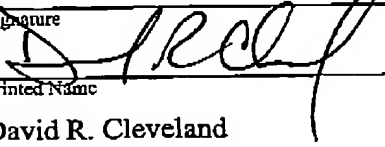
Applicants have made an earnest effort to address the rejections. Neither Fleming et al. nor Laubacher et al. show or suggest a step of applying a release polymer "to a portion of a substrate in a desired pattern", and would not show or suggest such a step if combined as proposed in the Office Action. Withdrawal of the rejections and allowance of all claims are requested. The Examiner is also requested to call the undersigned attorney if there are any questions regarding the application or this amendment.

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Respectfully submitted, on behalf of  
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Registration Number	Telephone Number
29,524	612-331-7412
Date	
May 15, 2006	

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